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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,222	04/06/2004	Daniel J. Lubich	DEKA:341US	7117
32425	7590	11/22/2005	EXAMINER	
FULBRIGHT & JAWORSKI L.L.P. 600 CONGRESS AVE. SUITE 2400 AUSTIN, TX 78701			FOX, DAVID T	
			ART UNIT	PAPER NUMBER
			1638	

DATE MAILED: 11/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/820,222	Applicant(s) LUBICH, DANIEL J.	
	Examiner David T. Fox	Art Unit 1638	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 August 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-5,7-10 and 12-14 is/are allowed.
- 6) ☒ Claim(s) 6,11 and 15-24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Applicant's statement regarding the intended deposit conditions on page 12 of the response of 25 August 2005 has overcome the enablement rejection of claims 1-24 regarding a deposit. Applicant's amendments of 25 August 2005 have overcome the following indefiniteness rejections: the indefiniteness rejection of claims 19-22 regarding the insertion of a "locus" rather than a "locus conversion", and the indefiniteness rejection of claim 21 regarding relative terms, as set forth on pages 2-3 of the last Office action.

Applicant's statement on page 7 of the response of 25 August 2005, regarding the intent to amend the specification and claims to replace the blanks with deposit accession numbers, is noted.

Claims 6, 11, 15-16 and 20 remain rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention, as stated on pages 2-3 of the last Office action.

Applicant's arguments filed 25 August 2005 have been fully considered but they are not persuasive. Applicant urges that Board Decisions in related applications render the remaining indefiniteness rejections moot. The Examiner maintains that such Board Decisions were not published and are therefore not precedential.

Claims 6, 11 and 15-24 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject

matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, as stated on pages 5-8 of the last Office action.

Applicant's arguments filed 25 August 2005 have been fully considered but they are not persuasive. Applicant urges that Board Decisions in related applications render the written description rejection moot. The Examiner maintains that such Board Decisions were not published and are therefore not precedential.

Claims 6, 11 and 15-24 remain rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention, as stated on pages 8-12 of the last Office action.

Applicant's arguments filed 25 August 2005 have been fully considered but they are not persuasive.

Applicant urges that the specification provides a working example of a single locus conversion, that the creation of male sterile plants has been "well-known for decades" (page 13 of the response of 25 August 2005), that backcrossing is well-known in the art and would therefore not constitute undue experimentation, and that the references cited by the Examiner are outdated, inapplicable, misquoted and otherwise non-persuasive.

The Examiner notes that the working example of a single locus conversion does not involve the instantly claimed inbred, and that the working example required several generations of backcrossing, which backcrossing was not recited in the instantly rejected claims.

Regarding male sterility, the Examiner acknowledges that nuclear and/or cytoplasmic genes responsible for male sterility are known, and have been transferred to different corn genotypes. However, the instant inbred's utility rests on its unique combination of genes at every locus, and the resultant unique combination of expressed traits. Unless the claims recite a process which would prevent the introgression of unwanted linked genetic material, which unwanted genetic material would remove some of the inbred's other genes and traits, the claims remain non-enabled.

Regarding backcrossing, the Examiner acknowledges that backcrossing is known in the art, but stresses that at least four generations of backcrossing steps must be recited in the claims, in order to minimize the presence of unwanted linked genetic material.

Regarding Murray et al, the Examiner maintains that the reference demonstrates that six generations of backcrossing unpredictably resulted in the reconstitution of only 90% of the recurrent parent's genome, rather than the predicted 99%. The Examiner thanks Applicant for pointing out that six rather than ten backcrosses were evaluated. Nevertheless, Murray et al teach that "it is apparent that linkage drag cannot always simply be reduced by additional cycles of backcrossing" (see page 84, second full paragraph).

Regarding Applicant's assertion that maize RFLP linkage maps have been updated since the publication of Murray et al, the Examiner maintains that the unpredictability taught above remains, regardless of how many RFLP markers are discovered or mapped. While Murray et al may suggest the combination of backcrossing and RFLP markers in order to reduce linkage drag, as noted by Applicant, such a combination of techniques was not taught in the instant specification.

See *Genentech, Inc. v. Novo Nordisk, A/S*, 42 USPQ2d 1001, 1005 (Fed. Cir. 1997), which teaches that disclosure of a "mere germ of an idea does not constitute [an] enabling disclosure", and that "the specification, not the knowledge of one skilled in the art" must supply the enabling aspects of the invention.

Regarding Kevern, the Examiner maintains that the reference teaches the difficulty in obtaining a particular genotype or phenotype, due to environmental effects which are present during selection. Regarding Carlone, the Examiner maintains that the reference teaches that hybrids produced by an inbred may not be useful, because of their lack of retention of the other advantageous traits possessed by the inbred, as stated in column 2, lines 8-14. Such a teaching is eminently applicable to claims 23-24, drawn to hybrids, which were included in the enablement rejection, as stated on page 9 of the last Office action.

Regarding Goldman et al, the Examiner maintains that the reference is applicable for its teaching that breeding for quantitative traits is unpredictable, wherein hybrid vigor is such a quantitative trait. See claims 23-24. Furthermore, Goldman et al

teach that breeding for quantitative traits is dependent upon reliable RFLP maps, wherein said maps are population-specific and therefore not universally applicable.

Regarding Stuber, the Examiner maintains that its teachings of hybrid performance are eminently applicable to claims 23-24.

Regarding Melchinger, the Examiner maintains that hybrids produced by the inbred may not exhibit heterosis, as taught by the reference. Furthermore, the hybrids would not necessarily retain the other agronomically desirable traits possessed by the inbred, as taught by Carlone. Applicant has not taught how to use hybrids which possess neither hybrid vigor nor other agronomically useful traits.

Claims 11 remains rejected under 35 U.S.C. 102(b) as being anticipated by Bockelman (US 6,420,637), as stated on pages 12-13 of the last Office action.

Applicant's arguments filed 25 August 2005 have been fully considered but they are not persuasive. Applicant urges that the Examiner has not demonstrated that the prior art corn plants would possess all of the traits of the exemplified inbred.

The Examiner maintains that his interpretation of "capable of" renders the claim anticipated by the prior art. The Examiner has interpreted "capable of" to include the possibility that the plant does not actually express every single trait of the exemplified inbred. While contrary interpretations of this term were set forth in the Board Decisions in related applications, such Decisions were unpublished and therefore not precedential.

Claims 1-10 and 12-24 remain free of the prior art, as stated on page 14 of the last Office action.

Claims 1-5, 7-10 and 12-14 are allowed.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David T. Fox whose telephone number is 571-272-0795. The examiner can normally be reached on Monday through Friday from 10:30AM to 7:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Jones, can be reached on 571-272-0745. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 9, 2005

DAVID T. FOX
PRIMARY EXAMINER
GROUP 180-1638

